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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,895	03/12/2001	Junichi Tsuji	Q63336	6637

7590 10/15/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS
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EXAMINER

THOMPSON, JAMES A

ART UNIT PAPER NUMBER

2624

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/802,895

Applicant(s)

TSUJI, JUNICHI

Examiner

James A Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Prelude to Prior Art Rejections

2. Claims 14-16 recite a printer which comprises all of the limitations of the image processing devices recited in claims 1-3, respectively. Claims 1-3 are therefore respectively discussed together with claims 14-16.

The printer of claim 20 comprises all of the limitations of claims 4 and 5. Claims 4, 5 and 20 are therefore discussed together.

Claims 21-22 recite a printer which comprises all of the limitations of the image processing devices recited in claims 6-7, respectively. Claims 6-7 are therefore respectively discussed together with claims 21-22.

Claims 25-30 recite a printer which comprises all of the limitations of the image processing devices recited in claims 8-13, respectively. Claims 8-13 are therefore respectively discussed together with claims 25-30.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole

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would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Nakamura (US Patent 5,684,262).

Regarding claims 1 and 14: Bell discloses a printer (figures 3 and 4 of Bell) for printing an image to recording material (figure 4(35) of Bell) according to image data (column 5, lines 11-14 of Bell). Figure 3 and figure 4 show different parts of the overall system taught by Bell (column 3, lines 3-11 of Bell).

Said printer comprises a speech data input unit (figure 3 (17) of Bell) for inputting speech data (column 4, lines 4-6 of Bell) associated with said image data for representing speech (column 4, lines 29-34 of Bell); and a speech data recorder (figure 4(43) of Bell) for recording the speech data to said recording material in association with said image (column 5, lines 30-35 of Bell).

Bell does not disclose expressly a voice tone converter for subjecting said speech data to tone conversion.

Nakamura discloses a voice tone converter (figure 1(16) of Nakamura) for subjecting speech data to tone conversion (column 5, lines 38-41 of Nakamura). Said voice tone converter performs operations under the control of a central processing unit (figure 1(21) and column 4, lines 50-51 of Nakamura).

Bell and Nakamura are combinable because they are from the same field of endeavor, namely the processing and recording of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the

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tone converter taught by Nakamura in the printer taught by Bell. The recorded speech data would then be tone-converted speech data. The motivation for doing so would have been to control the tone level based on the input level (column 5, lines 41-47 of Nakamura), thus improving the recorded audio signal. Therefore, it would have been obvious to combine Nakamura with Bell to obtain the invention as specified in claims 1 and 14.

Regarding claims 2 and 15: Bell does not disclose expressly that said voice tone converter stores plural sets of tone mode information; and a voice tone selector for selecting one of said plural sets of said tone mode information, wherein said voice tone converter subjects said speech data to tone conversion according to said selected tone mode information.

Nakamura discloses that said voice tone converter stores plural sets of tone mode information (column 4, lines 59-64 of Nakamura). Since said voice tone converter can select between plural sets of tone mode information (column 4, lines 59-64 of Nakamura), it is inherent that said plural sets of tone mode information are stored in some fashion. Otherwise, said plural sets of tone mode information would not be accessible to said voice tone converter.

Nakamura further discloses a voice tone selector (figure 1(23) of Nakamura) for selecting one of said plural sets of said tone mode information (column 5, lines 8-10 of Nakamura), wherein said voice tone converter subjects said speech data to tone conversion according to said selected tone mode information (column 5, lines 10-15 of Nakamura).

Bell and Nakamura are combinable because they are from the same field of endeavor, namely the processing and recording of audio data. At the time of the invention, it would have been

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obvious to a person of ordinary skill in the art to use a voice tone selector to control the tone mode and the associated tone mode information, as taught by Nakamura. The motivation for doing so would have been to be able to select different desired effects for the audio input signal (column 6, lines 35-42 of Nakamura). Therefore, it would have been obvious to combine Nakamura with Bell to obtain the invention as specified in claims 2 and 15.

5. Claims 3, 9, 16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Nakamura (US Patent 5,684,262) and Leveque (US Patent 5,495,468).

Regarding claims 3 and 16: Bell discloses sending speech data to said speech data recorder (column 4, lines 13-17 of Bell).

Bell does not disclose expressly that said voice tone converter generates conversion data for tone conversion control, and sends said conversion data to said speech data recorder; wherein said tone-converted speech data is constituted by said speech data before being converted and said conversion data.

Nakamura discloses that said voice tone converter generates conversion data for tone conversion control (column 5, lines 8-13 of Nakamura), and outputs both the tone-converted speech data and said speech data before being converted (column 4, lines 20-24 of Nakamura).

Bell and Nakamura are combinable because they are from the same field of endeavor, namely the processing and recording of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to generate the

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tone conversion data and output both the tone-converted audio data and the unconverted audio data, as taught by Nakamura. The motivation for doing so would have been to compensate for the tone variations in the input signal (column 5, lines 41-47 of Nakamura). Therefore, it would have been obvious to combine Nakamura with Bell.

Bell in view of Nakamura does not disclose expressly that said voice tone converter sends said conversion data to said speech data recorder; wherein said tone-converted speech data is constituted by said speech data before being converted and said conversion data.

Leveque discloses sending conversion data (figure 5a(CT₁) and column 5, lines 14-17 of Leveque) to an output device (column 5, lines 25-29 of Leveque); and that the audio data is constituted by said speech data before being converted (figure 5a(CV₁); and column 5, lines 2-4 and lines 10-12 of Leveque) and said conversion data (column 5, lines 25-29 of Leveque). The conversion data (CT₁...CT_N) is output along with the compressed, original voice data (column 5, lines 25-29 of Leveque) and used to control the expanding of the compressed data (column 5, lines 52-55 of Leveque).

Bell in view of Nakamura is combinable with Leveque because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to output the conversion data along with the audio data before being converted, as taught by Leveque, said conversion data and audio data being the conversion data and audio data taught by Bell in view of Nakamura. The motivation for doing so would have been that the conversion data can be saved in a different

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frequency band than the audio data (column 5, lines 12-17 of Leveque) and can therefore be saved in the same analog storage space as the audio data. Therefore, it would have been obvious to combine Leveque with Bell in view of Nakamura to obtain the invention as specified in claims 3 and 16.

Regarding claims 9 and 26: Bell discloses a printer (figures 3 and 4 of Bell) for printing an image to recording material (figure 4(35) of Bell) according to image data (column 5, lines 11-14 of Bell). Figure 3 and figure 4 show different parts of the overall system taught by Bell (column 3, lines 3-11 of Bell).

Said printer comprises a speech data input unit (figure 3 (17) of Bell) for inputting speech data (column 4, lines 4-6 of Bell) associated with said image data for representing speech (column 4, lines 29-34 of Bell); and a speech data recorder (figure 3(27) of Bell) for recording the speech data to said recording material in association with said image (column 4, lines 14-17 of Bell).

Bell does not disclose expressly a voice tone converter for generating conversion data for tone conversion control; and that said speech data controller records a combination of said speech data and said conversion data to said recording material.

Nakamura discloses a voice tone converter (figure 1(16) of Nakamura) generating conversion data for tone conversion control (column 5, lines 38-44 of Nakamura). Said voice tone converter performs operations under the control of a central processing unit (figure 1(21) and column 4, lines 50-51 of Nakamura).

Bell and Nakamura are combinable because they are from the same field of endeavor, namely the processing and recording of audio data. At the time of the invention, it would have been

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obvious to a person of ordinary skill in the art to include the tone converter taught by Nakamura in the printer taught by Bell. The motivation for doing so would have been to control the tone level based on the input level (column 5, lines 41-47 of Bell), thus improving the recorded audio signal. Therefore, it would have been obvious to combine Nakamura with Bell.

Bell in view of Nakamura does not disclose expressly that said speech data controller records a combination of said speech data and said conversion data to said recording material.

Leveque discloses outputting a combination of audio data and conversion data (figure 5a and column 5, lines 25-29 of Leveque). The conversion data ($CT_1...CT_N$) is output along with the compressed, original voice data ($CV_1...CV_2$) (column 5, lines 25-29 of Leveque) and used to control the expanding of the compressed data (column 5, lines 52-55 of Leveque).

Bell in view of Nakamura is combinable with Leveque because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to output the conversion data along with the audio data before being converted, as taught by Leveque, said conversion data and audio data being the conversion data and audio data taught by Bell in view of Nakamura and outputting said conversion data and said speech data by recording as taught by Bell. The motivation for doing so would have been that the conversion data can be saved in a different frequency band than the audio data (column 5, lines 12-17 of Leveque) and can therefore be saved in the same analog storage space as the audio data. Therefore, it would have been obvious to combine Leveque with Bell in view of

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Nakamura to obtain the invention as specified in claims 9 and 26.

6. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Nakamura (US Patent 5,684,262) and Kinoshita (US Patent 4,983,996).

Regarding claim 17: Bell discloses that said recording material is photosensitive material (column 5, lines 11-12 of Bell); and an image forming unit (figure 4(36) of Bell) for optically printing said image to said recording material (column 5, lines 11-14 of Bell). Exposing developed film onto a strip of photosensitive printing paper (column 5, lines 11-14 of Bell) is inherently an optical printing process. Said image forming unit further constituting said speech data recorder (column 5, lines 20-25 of Bell) to print said speech data (column 5, lines 30-35 of Bell).

Bell in view of Nakamura does not disclose expressly that said speech data is printed optically.

Kinoshita disclose optically printing speech data on a photosensitive recording material (column 4, lines 58-63 of Kinoshita).

Bell in view of Nakamura is combinable with Kinoshita because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to record said speech data taught by Bell in an optical form, as taught by Kinoshita. The motivation for doing so would have been to be able to print the speech data directly onto the film (column 5, lines 1-3 of Kinoshita). Therefore, it

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would have been obvious to combine Kinoshita with Bell in view of Nakamura to obtain the invention as specified in claim 17.

Regarding claim 18: Bell discloses that said image forming unit prints said speech data in a bar code form (column 5, lines 35-38 of Bell).

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Nakamura (US Patent 5,684,262) and Hatada (US Patent 4,270,853).

Regarding claim 19: Bell in view of Nakamura does not disclose expressly that said recording material includes a magnetic recording region, and said speech data recorder magnetically records said speech data.

Hatada discloses a speech data recorder (figure 5b(24) of Hatada) that magnetically records speech data on recording material that includes a magnetic recording region (figure 4b(8) and column 4, lines 29-33 of Hatada).

Bell in view of Nakamura is combinable with Hatada because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a speech data recorder that magnetically records the speech data, as taught by Hatada. The motivation for doing so would have been to be able to record voice or sound onto the picture without having to carry a tape recorder (column 1, lines 28-32 of Hatada). Therefore, it would have been obvious to combine Hatada with Bell in view of Nakamura to obtain the invention as specified in claim 19.

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8. Claims 4-7, 20-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Nakamura (US Patent 5,684,262) and Bernardi (US Patent 5,692,225).

Regarding claims 4, 5 and 20: Bell in view of Nakamura does not disclose expressly a speech/text converter for converting said speech data from said speech data input unit into text data for representing text; and a text data recorder for recording said text data to said recording material in association with said image.

Bernardi discloses a speech/text converter (figure 5(52) of Bernardi) for converting said speech data from said speech data input unit into text data for representing text (column 9, lines 1-6 of Bernardi); and a text data recorder (figure 5(43) of Bernardi) for recording said text data to said recording material in association with said image (column 9, lines 6-9 of Bernardi).

Bell in view of Nakamura is combinable with Bernardi because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the speech/text converter and text data recorder taught by Bernardi in the printer taught by Bell in view of Nakamura. The motivation for doing so would have been to be able to make printed annotations based on spoken notes (column 9, lines 37-40 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Bell in view of Nakamura to obtain the invention as specified in claims 4, 5 and 20.

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Regarding claims 6 and 21: Bell in view of Nakamura does not disclose expressly a text data input unit, externally operable, for inputting text data for representing text; and a text data recorder for recording said text data to said recording material in association with said image.

Bernardi discloses a text data input unit (figure 7(62) of Bernardi), externally operable, for inputting text data for representing text (column 10, lines 21-26 of Bernardi); and a text data recorder (figure 7(43) of Bernardi) for recording said text data to said recording material in association with said image (column 9, lines 3-9 of Bernardi). Said text data input unit scans in a card that must be put into said text data input unit (column 10, lines 22-23 of Bernardi). Therefore, said text data input unit is externally operable.

Bell in view of Nakamura is combinable with Bernardi because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the text data input unit and text data recorder taught by Bernardi in the printer taught by Bell in view of Nakamura. The motivation for doing so would have been to be able to make annotations to the resulting printed image from a simple hand-written card (column 10, lines 35-41 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Bell in view of Nakamura to obtain the invention as specified in claims 6 and 21.

Further regarding claims 7 and 22: Bernardi discloses that said text data includes at least one of a letter, a number, and a sign (column 10, lines 22-24 of Bernardi). Optical character recognition (column 10, lines 22-24 of Bernardi) recognizes at

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least letters and numbers, since letters and numbers are part of the ASCII set.

Regarding claim 24: Bell discloses that said text data recorder prints said text data by use of ink, toner or dye (column 5, lines 35-36 of Bell).

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Nakamura (US Patent 5,684,262), Bernardi (US Patent 5,692,225), and Kinoshita (US Patent 4,983,996).

Regarding claim 23: Bell discloses that said recording material is photosensitive material (column 5, lines 11-12 of Bell); and an image forming unit (figure 4(36) of Bell) for optically printing said image to said recording material (column 5, lines 11-14 of Bell). Exposing developed film onto a strip of photosensitive printing paper (column 5, lines 11-14 of Bell) is inherently an optical printing process.

Bell in view of Nakamura does not disclose expressly that said image forming unit is further constituted by said text data recorder, which optically prints said text data.

Bernardi discloses a text data recorder (figure 7(43) of Bernardi) which prints said text data (column 9, lines 3-9 of Bernardi).

Bell in view of Nakamura is combinable with Bernardi because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the text data recorder taught by Bernardi in the printer taught by Bell in view of Nakamura. The motivation for doing so would have been to be able to make

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annotations to the resulting printed image from a simple handwritten card (column 10, lines 35-41 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Bell in view of Nakamura.

Bernardi does not disclose expressly that said text data is printed optically.

Kinoshita disclose optically printing data on a photosensitive recording material (column 4, lines 58-63 of Kinoshita).

Bell in view of Nakamura and Bernardi is combinable with Kinoshita because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to print said alphanumeric text data taught by Bernardi using optical means, as taught by Kinoshita. The motivation for doing so would have been to be able to print the text data directly onto the film (column 5, lines 1-3 of Kinoshita). Therefore, it would have been obvious to combine Kinoshita with Bell in view of Nakamura to obtain the invention as specified in claim 23.

10. Claims 8 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Nakamura (US Patent 5,684,262), Bernardi (US Patent 5,692,225) and Spies (US Patent 6,035,273).

Regarding claims 8 and 25: Bell in view of Nakamura does not disclose expressly a text data input unit for inputting text data associated with said image data for representing text; and a text/speech converter for converting said text data into

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speech data, and sending said speech data to said speech data recorder.

Bernardi discloses a text data input unit (figure 7(62) of Bernardi) for inputting text data (column 10, lines 21-24 of Bernardi) associated with said image data (column 10, lines 6-9 of Bernardi) for representing text (column 10, lines 23-26 of Bernardi).

Bell in view of Nakamura is combinable with Bernardi because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the text data input unit taught by Bernardi in the printer taught by Bell in view of Nakamura. The motivation for doing so would have been to be able to make annotations to the resulting printed image from a simple handwritten card (column 10, lines 35-41 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Bell in view of Nakamura.

Bell in view of Nakamura and Bernardi does not disclose expressly a text/speech converter for converting said text data into speech data, and sending said speech data to said speech data recorder.

Spies discloses a text/speech converter (figure 1(32) of Spies) for converting said text data into speech data (column 4, lines 60-62 of Spies), and sending said speech data to an output device (figure 1(10); column 3, lines 20-22 and column 4, lines 3-8 of Spies).

Bell in view of Nakamura and Bernardi is combinable with Spies because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the

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invention, it would have been obvious to a person of ordinary skill in the art to include the text/speech converter taught by Spies to convert the text read by the text data input unit taught by Bernardi into speech. The motivation for doing so would have been to provide an audial reproduction of the annotations (column 5, lines 1-4 of Spies). Therefore, it would have been obvious to combine Spies with Bell in view of Nakamura and Bernardi to obtain the invention as specified in claims 8 and 25.

11. Claims 10-11, 13, 27-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Bernardi (US Patent 5,692,225) and Spies (US Patent 6,035,273).

Regarding claims 10 and 27: Bell discloses a printer (figures 3 and 4 of Bell) for printing an image to recording material (figure 4(35) of Bell) according to image data (column 5, lines 11-14 of Bell). Figure 3 and figure 4 show different parts of the overall system taught by Bell (column 3, lines 3-11 of Bell).

Said printer comprises a data input unit (figure 3 (17) of Bell) for inputting speech data (column 4, lines 4-6 of Bell) associated with said image data for representing speech (column 4, lines 29-34 of Bell); and a data recorder (figure 4(43) of Bell) for recording said speech data to said recording material in association with said image (column 5, lines 30-35 of Bell).

Bell does not disclose expressly that said data input unit inputs text data associated with said image data for representing text; and a converter for converting said text data into speech data for representing speech.

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Bernardi discloses a data input unit (figure 7(62) of Bernardi) for inputting text data (column 10, lines 21-24 of Bernardi) associated with said image data (column 10, lines 6-9 of Bernardi) for representing text (column 10, lines 23-26 of Bernardi).

Bell and Bernardi are combinable because they are from the same field of endeavor, namely photographic devices that add annotations to specific images in a set of image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to input text data with the input unit taught by Bernardi instead of speech data, as taught by Bell. The motivation for doing so would have been to be able to make annotations to the resulting printed image from a simple handwritten card (column 10, lines 35-41 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Bell.

Bell in view of Bernardi does not disclose expressly a converter for converting said text data into speech data for representing speech.

Spies discloses a converter (figure 1(32) of Spies) for converting said text data into speech data for representing speech (column 4, lines 60-62 of Spies).

Bell in view of Bernardi is combinable with Spies because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the converter taught by Spies to convert the text read by the data input unit taught by Bernardi into speech. The motivation for doing so would have been to provide an audial reproduction of the annotations (column 5, lines 1-4 of Spies). Therefore, it would have been obvious to combine Spies with Bell

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in view of Bernardi to obtain the invention as specified in claims 10 and 27.

Regarding claims 11 and 28: Bell does not disclose expressly that said data recorder further records said text data to said recording material in association with said image.

Bernardi discloses recording said text data to said recording material (column 10, lines 21-26 of Bernardi) in association with said image (column 10, lines 17-21 of Bernardi).

Bell and Bernardi are combinable because they are from the same field of endeavor, namely photographic devices that add annotations to specific images in a set of image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further record the text data, as taught by Bernardi. The motivation for doing so would have been to be able to see the annotation in a form that is printable (column 10, lines 23-26 of Bernardi), and therefore readable. Therefore, it would have been obvious to combine Bernardi with Bell to obtain the invention as specified in claims 11 and 28.

Regarding claims 13 and 30: Bell discloses a printer (figures 3 and 4 of Bell) for printing an image to recording material (figure 4(35) of Bell) according to image data (column 5, lines 11-14 of Bell). Figure 3 and figure 4 show different parts of the overall system taught by Bell (column 3, lines 3-11 of Bell).

Said printer comprises a data input unit (figure 3 (17) of Bell) for inputting speech data (column 4, lines 4-6 of Bell) associated with said image data for representing speech (column 4, lines 29-34 of Bell); and a data recorder (figure 4(43) of

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Bell) for recording the speech data to said recording material in association with said image (column 5, lines 30-35 of Bell).

Bell does not disclose expressly that said data input unit is a text data input unit for inputting text data associated with said image data for representing text; and that said data recorder records said text data and conversion data to said recording material in association with said image, said conversion data being adapted to production of speech according to said text data.

Bernardi discloses a text data input unit (figure 7(62) of Bernardi) for inputting text data associated with said image data (column 10, lines 19-24 of Bernardi) for representing text (column 10, lines 23-26 of Bernardi); and a data recorder (figure 5(43) of Bernardi) for recording said text data to said recording material in association with said image (column 9, lines 6-9 of Bernardi)

Bell and Bernardi are combinable because they are from the same field of endeavor, namely photographic devices that add annotations to specific images in a set of image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to record said text data with the data recorder taught by Bernardi. The motivation for doing so would have been to be able to make printed annotations based on spoken notes (column 9, lines 37-40 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Bell.

Bell in view of Bernardi does not disclose expressly recording conversion data, said conversion data being adapted to production of speech according to said text data.

Spies discloses providing conversion data (column 4, lines 40-54 of Spies), said conversion data being adapted to

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production of speech according to said text data (column 4, lines 55-59 of Spies).

Bell in view of Bernardi is combinable with Spies because they are from the same field of endeavor, namely the control and processing of audio data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the conversion data taught by Spies when recording the text data, as taught by Bernardi. The motivation for doing so would have been to be able create an accurate representation of the speech, including rate and pitch variations (column 4, lines 55-59 of Spies), instead of a monotone computer generated readout of plain text data. Therefore, it would have been obvious to combine Spies with Bell in view of Bernardi to obtain the invention as specified in claims 13 and 30.

12. Claims 12 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell (US Patent 5,276,472) in view of Bernardi (US Patent 5,692,225).

Regarding claims 12 and 29: Bell discloses a printer (figures 3 and 4 of Bell) for printing an image to recording material (figure 4(35) of Bell) according to image data (column 5, lines 11-14 of Bell). Figure 3 and figure 4 show different parts of the overall system taught by Bell (column 3, lines 3-11 of Bell).

Said printer comprises a data input unit (figure 3(17) of Bell) for inputting speech data (column 4, lines 4-6 of Bell) associated with said image data for representing speech (column 4, lines 29-34 of Bell); and a data recorder (figure 4(43) of Bell) for recording the speech data to said recording material in association with said image (column 5, lines 30-35 of Bell).

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Bell does not disclose expressly a converter for converting said speech data into text data for representing text; and that said data recorder records said text data to said recording material in association with said image.

Bernardi discloses a converter (figure 5(52) of Bernardi) for converting said speech data into text data for representing text (column 9, lines 1-6 of Bernardi); and a data recorder (figure 5(43) of Bernardi) for recording said text data to said recording material in association with said image (column 9, lines 6-9 of Bernardi).

Bell and Bernardi are combinable because they are from the same field of endeavor, namely photographic devices that add annotations to specific images in a set of image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the converter taught by Bernardi and record said text data with the data recorder taught by Bernardi. The motivation for doing so would have been to be able to make printed annotations based on spoken notes (column 9, lines 37-40 of Bernardi). Therefore, it would have been obvious to combine Bernardi with Bell to obtain the invention as specified in claims 12 and 29.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Viktors Berstis, US Patent 6,721,001 B1, 13 April 2004, filed 16 December 1998.

Adams et al., US Patent 6,563,563 B2, 13 May 2003, filed 7 July 1999.

Jeffrey R. Stoneham, US Patent 5,363,158, 8 November 1994.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A Thompson whose telephone number is 703-305-6329. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James A. Thompson
Examiner
Art Unit 2624

JAT
8 October 2004



THOMAS D.
~~THOMAS~~ LEE
PRIMARY EXAMINER